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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,585	03/01/2002	Takuma Saito	H07-137800M/NHK	8975

7590 05/13/2003

McGinn & Gibb, PLLC
Suite 200
8321 Old Courthouse Road
Vienna, VA 22182-3817

EXAMINER

LOPEZ, MICHELLE

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 05/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,585

Applicant(s)

SAITO ET AL.

Examiner

Michelle Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 0102.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Specification

2. The abstract of the disclosure is objected to for not being descriptive. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Drawings

4. Figure 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "5" on page 8, line 3 and "15" on page 8, line 9 have both been used to designate a hammer. Also, reference characters "7b" on page 9, line 4 and "7a" on page 9, lines 12-13 have both been used to designate a fixed gear support jig.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "7b" has been used to designate both a fixed gear support jig on page 9, line 4 and holes on page 9, line 12. Also, reference character "8" has been used to designate both a speed reduction mechanism portion on page 1, line 14 and a planetary gears on page 2, line 2.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki (US Pat. 5,601,149) in view of Taylor (US Pat. 6,098,726). Kawasaki discloses the invention as claimed including a motor "M", a speed reduction mechanism "21", a striking mechanism portion (see Fig. 2), and an end tool "16". Kawasaki does not disclose an impact damping mechanism. However, Taylor teaches an impact damping mechanism for the purpose of damping an impact in a direction of rotation (see Fig. 2). In view of Taylor, it would have been obvious to one having ordinary skill in the art to have provided Kawasaki's invention including a damping mechanism located at the speed reduction mechanism with projections "38" formed on a fixed gear and an impact damping member "44" in order to reduce the impact force of the hammer in the direction of rotation damping the torsional vibration generated by the impact.

Kawasaki does not specifically state a damping mechanism located in a direction of rotation of the speed reduction mechanism. However, Examiner takes Official Notice of the well-known act of including a damping mechanism located in a direction of rotation of a speed reduction mechanism for the purpose of damping the rotational impact force of the hammer when it moves toward the speed reduction mechanism. Therefore, it would have been obvious to one having ordinary skill in the art to have provided Kawasaki's invention including a damping mechanism located in a direction of rotation of the speed reduction mechanism in order to reduce the impact force of the hammer in the direction of rotation damping the torsional vibration generated by the impact.

Regarding claim 2, Kawasaki does not disclose projections formed on an outer surface of a fixed gear, an impact damping member, and a fixed gear support jig. However, Taylor teaches projections "38" on a fixed gear "20", an impact damping member "44" provided between the

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projections and the fixed gear support jig, and a fixed gear support jig "24" for the purpose of engaging the fixed gear within the inner periphery of the fixed gear support jig in which the projections of the fixed gear compress the impact members when the damping mechanism is in operation. In view of Taylor, it would have been obvious to one having ordinary skill in the art to have provided Kawasaki's invention including projections on a fixed gear, an impact damping member provided between the projections and the fixed gear support jig, and a fixed gear support jig in order to reduce the impact force of the hammer in the direction of rotation, damping the torsional vibration generated by the rotational impact of the hammer.

Regarding claims 5 and 7, it would have been obvious to one having ordinary skill in the art to have provided Kawasaki's invention including an impact damping member provided between a bearing of the striking mechanism portion and a housing for the purpose of providing a torsional vibration damping mechanism within the power tool mechanism.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hornschuch (US Pat. 3,174,606), Alexandrov (US Pat. 4,585,078), and Hosoya (US Pat. 5,873,786) are cited to show related inventions.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 703-305-8205. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 703-308-2187. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-308-7769 for regular communications and 703-305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

ML
May 5, 2003



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700